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(71) Applicant (for all designated States except US): THE  
GENERAL HOSPITAL CORPORATION [US/US]; 55  
Fruit Street, Boston, MA 02114 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): PAPISOV, Mikhail,  
I. [RU/US]; 60 Woodside Road, Winchester, MA 01890  
(US). YURKOVETSKIY, Alexander [US/US]; 2 Old  
Farm Road, Littleton, MA 01460 (US).

(74) Agent: LAGNEAU, Nadege, M.; Choate, Hall & Stewart,  
Exchange Place, 53 State Street, Boston, MA 02109 (US).

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(54) Title: OXIME CONJUGATES AND METHODS FOR THEIR FORMATION AND USE

(57) Abstract: The present invention relates to biodegradable biocompatible polyketals, methods for their preparation, and meth-  
ods for treating animals by administration of biodegradable biocompatible polyketals. In one aspect, a method for forming the  
biodegradable biocompatible polyketals comprises combining a glycol-specific oxidizing agent with a polysaccharide to form an  
aldehyde intermediate, which is combined with a reducing agent to form the biodegradable biocompatible polyketal. The resultant  
biodegradable biocompatible polyketals can be chemically modified to incorporate additional hydrophilic moieties. A method for  
treating animals includes the administration of the biodegradable biocompatible polyketal in which biologically active compounds or  
diagnostic labels can be disposed. The present invention also relates to chiral polyketals, methods for their preparation, and methods  
for use in chromatographic applications, specifically in chiral separations. A method for forming the chiral polyketals comprises  
combining a glycol-specific oxidizing agent with a polysaccharide to form an aldehyde intermediate, which is combined with a suit-  
able reagent to form the chiral polyketal. A method for use in chiral separations includes the incorporation of the chiral polyketals  
in the mobile phase during a chromatographic separation, or into chiral stationary phases such as gels. The present invention further  
relates to chiral polyketals as a source for chiral compounds, and methods for generating such chiral compounds.



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